Environmental Health Information System — *an open source approach*

Robert Cooke — Health Service Executive
Criteria for selecting best solution

- Reliability
- Robustness
- Cost
- Scalability
- Security
- Control
- Choice
Background

- Environmental Health Service
  
  “protect the health of the public by controlling and preventing those factors in the environment which may cause ill health or reduced quality of life.”
Background

- Environmental Health Service
- “Prevention is better than cure”
  - Cosmetic product regulations
  - Drinking water regulations
  - Food safety regulations
  - Pre-school regulations
  - Infectious disease regulations
  - Noise control, tobacco control, Air quality...
Background

- 600+ environmental health officers
- + administration staff
- + management
- 80+ offices
Background

- 600+ environmental health officers
- + administration staff
- + management
- 80+ offices
- ...a very mobile workforce
- ...internet connectivity not guaranteed
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- Cost
- Scalability
- Security
- Control
- Choice
- Support for mobile workers
Environmental Health Information System

• TE-Environment (Tascomi Ltd.)
Environmental Health Information System

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  – Functionality
    • Alerts, Complaints, Sampling
    • Inspections, Licensing
    • Port Health, Communicable diseases
    • Premises, Locations, Initiatives
Environmental Health Information System

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- mobility
Tools used in TE-Environment

- CentOS (Linux variant)
- Apache (Web Server)
- Postgres (Database Server)
- PHP (Server side programming language)
- ...
- HTML5 (Client side markup language)
HTML5

- Mobile capability
  - Open standard rather than open source
  - Offline web application support
  - Advanced forms
  - Web Storage
  - GeoLocation API (separate specification)
Other EHO requirements

- Environmental Health Information System
- Email
- Word Processing
- Intranet
- Payroll
- Other function specific databases and applications
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Current position

• Currently piloting main system
• Spending a number of weeks on finalising elements of mobile solution before it too goes into pilot.
Other related projects

- National Child Care information System (NCCIS)
  - 2000+ mobile workers

- Standardised Assessment Tool (SAT)
  - 3000+ mobile workers
Previous Open Source projects

• Health Atlas
  – Award winning web application
  – It is an open source mapping, database and statistical system
  – Supports planning and monitoring
  – Integrates geographic information with health event datasets and statistical components

http://www.hse.ie/eng/services/maps/
• Thank You